CLAIMS

1. Magnetic tape comprising a substrate, a magnetic layer provided on one side of said substrate and a backcoating layer provided on the other side of said substrate, wherein:

said backcoating layer comprises a binder and fine particles having been dispersed in said binder and being capable of irreversibly changing in color on oxidation reaction, and has a sufficient number of microvoids of sufficient size to supply sufficient oxygen to cause said oxidation reaction.

2. Magnetic tape as claimed in claim 1, wherein said backcoating layer is to be irradiated with a light beam to cause oxidation of said fine particles whereby said fine particles undergo color change to form a color change pattern of prescribed form on the backcoating layer so that servo tracking of data tracks on said magnetic layer can be carried out based on the optical information provided from said color change pattern.

3. Magnetic tape as claimed in claim 1, wherein the void volume of said microvoids in said backcoating layer is 5 to 40% by volume.

4. Magnetic tape as claimed in claim 1, wherein said fine particles comprise a metal oxide having a primary particle size of 1 to 200 nm.

5. Magnetic tape as claimed in claim 4, wherein said metal oxide comprises FeO_x ($1.34<x<1.5$), TiO, SnO, MnO or Cr_2O_3.

6. Magnetic tape as claimed in claim 1, wherein said backcoating layer has an arithmetic mean roughness Ra of 7 to 50 nm and a 10 point mean roughness Rz of 40 to 250 nm.

7. Magnetic tape as claimed in claim 1, wherein said backcoating layer contains 0.1 to 5 parts by weight of carbon black per 100 parts by weight of said binder, said carbon black having a primary particle size of 15 to 80 nm, a BET specific surface area of 10 to 80 m^2/g, and a DBP oil absorption of 100 to 300 $cm^3/100$ g.

8. Magnetic tape as claimed in claim 1, wherein said backcoating layer contains 0.05 to 10 parts by weight of silicone resin particles having a primary particle size of 10 to 500 nm per 100 parts by weight of said binder.

9. Magnetic tape as claimed in claim 1, wherein said backcoating layer contains 5 to 100 parts by weight of electrically conductive inorganic particles having a primary particle size of 1 to 100 nm per 100 parts by weight of said fine particles.

10. Magnetic tape as claimed in claim 9, wherein said electrically conductive inorganic particles comprise tin oxide, antimony-doped tin oxide, indium-doped tin oxide or indium oxide.

11. Magnetic tape as claimed in claim 1, wherein said color change pattern comprises a single or a plurality of continuous lines having a prescribed width along the longitudinal direction of the tape.

12. Magnetic tape as claimed in claim 1, wherein said color change pattern comprises discontinuous pieces of lines having a prescribed width along the longitudinal direction of the tape.

13. Magnetic tape as claimed in claim 1, wherein servo tracking is carried out by detecting reflected light of the light incident on said color change pattern.

14. Magnetic tape as claimed in claim 1, wherein servo tracking is carried out by detecting transmitted light of the light incident on said color change pattern.

15. Magnetic tape as claimed in claim 1, wherein at least one magnetic or nonmagnetic intermediate layer is provided between said substrate and said magnetic layer, and said magnetic layer comprises acicular or spindle-shaped ferromagnetic metal powder having a major axis length of 0.03 to 0.2 μm or tabular ferromagnetic hexagonal ferrite powder having a tabular diameter of 0.1 μm or smaller.

16. Magnetic tape comprising a substrate, a magnetic layer provided on one side of said substrate and a backcoating layer provided on the other side of said substrate, wherein:

said backcoating layer comprises a binder and fine particles having dispersed in said binder and being capable of irreversibly changing in color on oxidation reaction, and has a sufficient number of microvoids of sufficient size to supply sufficient oxygen to cause said oxidation reaction, and

said fine particles have changed in color to form a color change pattern of prescribed form on said backcoating layer.